

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Implementation of the Local Competition)	CC Docket No. 96-98
Provisions in the Telecommunications Act)	
of 1996)	
)	
Inter-Carrier Compensation)	CC Docket No. 99-68
for ISP-Bound Traffic)	

**COMMENTS BY RNK ON REMAND OF THE FEDERAL COMMUNICATIONS
COMMISSION’S RECIPROCAL COMPENSATION DECLARATORY RULING
BY THE U.S. COURT OF APPEALS FOR THE D.C. CIRCUIT**

INTRODUCTION

RNK, Inc. d/b/a RNK Telecom (“RNK”) is a registered Competitive Local Exchange Carrier (“CLEC”) in the Commonwealth of Massachusetts offering residential and business telecommunications services via its own facilities, and by resale. Pursuant to the Federal Communications Commission (“FCC” or “Commission”) Public Notice released June 23, 2000,¹ requesting comment on remand from the U.S. Court Of Appeals for the D.C. Circuit² (“DC Court” or “Court”) of the Commission’s Ruling, *In the Matter of the Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, 14 FCC Rcd. 3689 (1999) (“the Ruling”), of February 26, 1999, RNK submits these comments.

¹ *Public Notice*, FCC 00-227 (June 23, 2000) (“*Public Notice*”).

² *Bell Atlantic Telephone Companies v. Federal Communication Commission, et al.*, 206 F.3d 1 (1999) (Decided March 24, 2000) (“the remand”).

Pursuant to the Notice and the Telecommunications Act of 1996³ (“the Act”), we understand the FCC to “seek comment on the issues identified by the Court in its decision.”⁴

In particular, [the FCC] ask[s] parties to comment on the **jurisdictional nature of ISP-bound traffic**, as well as the **scope of the reciprocal compensation requirement of section 251(b)(5) [of the Act]**, and on the **relevance of the concepts** of “termination,” “telephone exchange service,”⁵ “exchange access service,”⁶ and “information access.”⁷ Finally, we seek comment regarding any **new or innovative inter-carrier compensation arrangements** for ISP-bound traffic that parties may be considering or may have entered into, either voluntarily or at the direction of a state commission, during the pendency of this proceeding.”⁸ (Highlighting added. Footnotes in original.)

Accordingly, RNK will comment that:

- (1) The jurisdictional nature of ISP-bound traffic is far less important, within the present posture of the instant case and overview of the relevant issues, than is the scope of § 251 (b)(5) of the Act and is the relevance of certain terms of art identified by the Commission that are critical to a proper and accurate understanding and analysis of the instant matter.
- (2) The scope of the reciprocal compensation requirement under § 251(b)(5) of the Act unequivocally encompasses the transport and termination of ISP-bound traffic, so that:

³ 47 U.S.C. §§ 151-714.

⁴ *Public Notice* at 1.

⁵ *See* 47 U.S.C. § 153(47).

⁶ *See* 47 U.S.C. § 153(16).

⁷ *See* 47 U.S.C. § 251(g); *see also* 47 U.S.C. § 153(20).

⁸ *Public Notice* at 1. (Footnotes in the original.)

- (a) Section 251(b)(5) mandates, based upon the relevant terms, reciprocal compensation for ISP-bound traffic; and
 - (b) the Commission's chosen method of analysis was fatally flawed as unreasonably extended beyond the analysis' traditional scope, not relevant in the context applied and contradicts the technical truths of ISP-bound traffic
 - (c) a more accurate rendition of ISP-bound traffic includes the factual and technical evidence that it is comprised of "multiple components;" and
- (3) The FCC should analyze and review new or innovative inter-carrier compensation arrangements for ISP-bound traffic in light of their factual relevance to the relationships between the parties, including examinations of:
- (a) current interconnection agreement amendments regarding reciprocal compensation *which reflect unequal bargaining power of the parties and/or parties which do not contemplate exchanging relevant traffic*; and
 - (b) the monitoring and tracking of ISP-bound and ISP-outbound traffic (collectively "Internet" traffic) to determine actual traffic line-minutes at issue in the instant matter.

The relevance, in RNK's opinion, of the concepts and terms or art "termination," "telephone exchange service," "exchange access service," and "information access" should become amply clear in our discussions. As we will discuss, these terms are not only relevant, but material, central, and nearly dispositive of the entire matter at hand and at issue.

I. POSTURE OF THE CASE AND OVERVIEW OF THE ISSUES: JURISDICTION

A. Comment on the Ruling

In the Ruling, the FCC dwelled on three broad areas related to the application of § 251 (b)(5) for purposes of ISP-bound telecommunications traffic: the FCC's jurisdiction over the subject; specific application of § 251 to such traffic, and; the effect

of the Ruling on interconnection agreements and State rulings and interpretations of the Ruling for such traffic.

While the Act itself conferred upon the FCC specific, new and additional jurisdiction over "local" telecommunications generally,⁹ the Commission, in the Ruling, went to great lengths to reiterate its independent jurisdiction over ISP-bound traffic on grounds relating to the interstate nature of various aspects of that traffic. In reaffirming its jurisdictional authority, the FCC relied upon a panoply of analyses, "end-to-end," interwoven with its historical jurisdiction over telecommunications traffic that cross state lines. The main feature of an "end-to-end" determination relative to the instant remand, though proffered in the Ruling largely by example only, is a determination as to whether telecommunications break continuous communications at points of "switching" or between "carriers."¹⁰

The FCC, jurisdiction already well established over ISP-bound traffic, then used its "end-to-end analysis"¹¹ as purporting to pigeonhole ISP-bound traffic as "interstate," while sporadically and unnecessarily alluding to its concurrent and independent jurisdiction conferred by the Act over whatever local portions or components of such a communication that may also occur. At the very least, if the Commission solely intended to apply its end-to-end analysis to its jurisdiction, it would need to clearly and specifically so state. In this fledgling market, as the Commission is no doubt keenly

⁹ See generally, 47 U.S.C. § 151 et seq.

¹⁰ The D.C. Court observed that the FCC "has focused on 'the end points of the communication and consistently has rejected attempts to divide communications at any intermediate points *of switching or exchange between carriers.*' " citing FCC Ruling, 14 FCC Rcd. At 3695 (p. 10) (Emphasis added.) Later, we will mention the important undisputed facts that an ISP neither operates telephonic switches, nor is a "carrier" under the Act or any FCC ruling or order.

¹¹ 206 F.3d at 1.

aware, those companies with knowledgeable staff and expansive resources can make interesting use of any slightly ambiguous state and federal language to accomplish their goals, and potentially thwart competition as intended by the Act, and the Commission.

In the Ruling, the D.C. Court viewed the Commission to then roll the end-to-end analysis over inexplicably into its next area of inquiry: the application of reciprocal compensation specifically, under § 251 of the Act, to such traffic. Simultaneously tip-toeing around its refusal to direct states to treat ISP-bound traffic one way or the other (as subject to reciprocal compensation, or not), the Commission then proceeded to conject that, if their application of this 'end-to-end analysis' deems this ISP-bound traffic to be "interstate" for purposes of jurisdiction, it would follow that the FCC – at least, though, curiously, not necessarily the states – could not mandate payment of reciprocal compensation, only required for "local" traffic, for ISP-bound traffic originating and terminating within the same exchange area.

In this inference, the Commission rested heavily on its previous determination that § 251 (b)(5) as such, requiring reciprocal compensation, applied only to "local" traffic.¹² Flamingly, this prior determination that § 251 applies only to "local" traffic stemmed from the FCC's interpretation of the Act as requiring reciprocal compensation to apply to such traffic that had not previously, before the Act, been exchanged between carriers, i.e., so-called long distance service (further defined below), and therefore already compensated through existing "exchange access charges,"¹³ i.e., in turn, all remaining, "local," traffic.

¹² 47 CFR § 51.701(a). 206 F.3d at 1.

¹³ 47 U.S.C. § 153(16).1, § 251(c)(2).

ISP's, meanwhile, are not subject to access charges, as they are exempt in their capacity as "information services."¹⁴ ISPs, in contrast, are "information service providers," *Universal Service Report*, 13 FCC Rcd at 11532-33 (p 66), which upon receiving a call originate further communications to deliver and retrieve information to and from distant websites.¹⁵

As the D.C. Court observed, the FCC itself refers to calls to ISPs as local.¹⁶

As discussed technically below, Part V, *infra*, RNK, which provides telecommunications services to these information platforms, concurs with the Commission's exemption of ISP's from common carrier status, as they are not "providers of telecommunications services" under the Act as a whole ("carriers"),¹⁷ rather provide so-called "enhanced services" by combining their facilities' media conversion and/or translation and multi-task routing (as distinct from electronic switching) capabilities with their use of *other* companies' telecommunications services.

Nonetheless, the FCC has flip-flopped numerous times on whether this exemption to exchange access charges for ISPs was *because* ISP's would otherwise be subject to access charges due to their quasi-interstate features, or whether ISP's are exempt *because* they are not "interstate" or "carriers" or "telecommunications" within the meanings of the relevant regulations. These distinctions are not only confusing, as discussed and clarified below, but are not, we think, dispositive of the underlying dilemma; in fact, these equivocations serve best to illustrate the underlying reality that ISP-bound *and* "Internet"

¹⁴ *Access Charge Reform Order*, 12 FCC Rcd at 16134. *See also* 47 U.S.C. ' 230(b)(2) ("It is the policy of the United States to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.").

¹⁵ 206 F.3d at 6.

¹⁶ "[The FCC] also referred to calls to information service providers as 'local.'" 206 F.3d at 8, *citing* 12 FCC Rcd at 16132.

¹⁷ 47 U.S.C. 153(26); *cf.*, 47 U.S.C. 153(20).

traffic (themselves two differentiable technological phenomena) are, in fact, unique and novel communications transmissions.

B. Comment on Remand

It was at this point that the D.C. Court vacated the Ruling and remanded it for further consideration for "want of reasoned decision making."¹⁸ The D.C. Court conscientiously limited their judicial review and vacatur to the reasonableness of the FCC's conclusions in the Ruling, specifically the want of reason in the application of the end-to-end analysis to this context.¹⁹ The Court reserved "judicial judgment" on the correct conclusions regarding categorization and compensation for ISP-bound traffic, but stated strongly and unequivocally in their holding and dicta that the criteria employed by the FCC in both their selection and application of their analysis were fatally flawed.

The Court made clear certain factors which both lead to their decision -- those factors which, if satisfied, might have led to a different result -- and to which the Court might look in their own reasoned analysis on the record. This is not to say that, on remand, the FCC could not develop an entirely new set of reasoning in support, at least of its reciprocal compensation application conclusions that might pass judicial muster. Although, for purposes of solidifying the local market, upholding contractual obligations and contractual intent, and thereby avoiding unnecessary litigation, and for general fairness, expediency, and efficiency, RNK respectfully urges the Commission not to backpedal. The Court provided guidance to help the FCC on at least one reasonable and

¹⁸ 206 F.3d at 3.

¹⁹ "Because the Commission has not provided a satisfactory explanation why LECs that terminate calls to ISPs are not properly seen as "terminat[ing] ... local telecommunications traffic," and why such traffic is exchange access" rather than "telephone exchange service," we vacate the ruling and remand the case to the Commission." 206 F.3d at 8.

most obvious set of requirements and a conclusion which, if met, would satisfy *that* court: that the portion of Internet traffic terminating at the ISP was not subject properly to the traditional end-to-end analysis, nor to most of the criteria employed by the FCC in this analysis' selection and application in the instant case.

C. RNK's Position

While ISP-bound and/or Internet communication, or components thereof, can be fairly categorized as local, interstate, intrastate, in-state, etc., the categorization itself – either way -- need not be the death knell to any fair and consistent application of the Act, FCC regulations or orders, existing or future interconnection agreements, or the respective authority of the federal and state commissions. Since the inception of the Act, the FCC, the courts and the states, have been round-and-round forcibly categorizing such traffic as either local or interstate; it can be either or both, but the application of § 251(b) (5) need not hinge entirely on the classification. The efforts at rigid classification along historic "local" or "interstate" lines at this juncture is, frankly, beating the proverbial dead horse. Fortuitously, jumping ahead to one query made in the February 26, 1999, Ruling's Notice of Proposed Rulemaking, it is *not* "too difficult"²⁰ to examine exactly what this new phenomenon entails, technologically, telephonically, micro- and macroeconomically.

D. The Role of Negotiated Interconnection Agreements

While the Court and the FCC tended to agree that, in an ideal world, these matters could be best resolved in negotiations between equal bargaining partners in future interconnection agreements, the paucity of this real world negotiating equality in fact

²⁰ *Ruling* at ¶ 36.

evoked passage of the Act in the first place, and lead Congress to require ILECs to make certain concessions, such as making interconnection and Interconnection Agreements mandatory. Accordingly, it is squarely within the FCC's realm, not to mention the Act's mandate, to address the very issues such as the one at hand. The FCC is responsible under the Act *not* to relegate interconnection arrangements and compensation to an as-yet unrealized open market, but rather to assert its authority to ensure that the as-yet *unequal*, in fact subjugate, parties such as CLECs get a fair shake and a running start in market entry in a market that is still approximately 95 percent controlled by ILECs. The timing of the Act itself evidences intent on the part of Congress to open specifically new markets, most notably such as ISP and Internet traffic, to new competitors.²¹

E. Relevant Inquiry

So, how shall the FCC direct the implementation of the Act relative to ISP-bound traffic? The D.C. Court looked to and suggested a few starting areas of inquiry. The Court observed that the instant case took the FCC "beyond ... traditional telephone service boundaries."²² The Court opined that evaluation of these ISP or Internet phenomena could hinge on closer and perhaps novel examination of:

²¹ 47 U.S.C. § 160: Competition in provision of telecommunications service

(b) Competitive effect to be weighed in making the determination [to forbear application of any regulation or provision of this chapter], the Commission shall consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services. If the Commission determines that such forbearance will promote competition among providers of telecommunications services, that determination may be the basis for a Commission finding that forbearance is in the public interest.

²² 206 F.3d at 4.

- "circuit-switched... [versus] "distributed packet-switched network[s],"²³ in determining the discontinuity, routing and/or transformation of relevant traffic,
- the definitions of "termination"²⁴ or "origination"²⁵ of a "call"²⁶ or "telecommunication"²⁷ between "end users"²⁸ and/or "carriers,"²⁹ especially insofar as a call is or is not "continuous,"³⁰ i.e., "unchanged in form or content,"³¹

²³ "Unlike the conventional circuit-switched network, the Internet is a "distributed packet-switched network," 206 F.3d at 4, citing *In the Matter of Federal-State Joint Board on Universal Service*, 13 FCC Rcd. 11501, 11532 (p. 64) (1998) ("Universal Service Report") (Emph. Added.) ("Universal Service" not coincidentally being an area from which ISPs are accordingly exempt from contribution as "end users.")

²⁴ 47 U.S.C. s 153:

(47) "Telephone exchange service" is defined as: (A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service.

(16) Exchange access

The term "exchange access" means the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services. 47 U.S.C. s 153.

"[T]elecommunications traffic" is local if it "originates and terminates within a local service area." 47 CFR s 51.701(b)(1).

²⁵ *Id.*

²⁶ "Such a [LEC/ISP] customer, an "end user" of the telephone system, will use a computer and modem to place a **call** to the ISP server in his local calling area. He will usually pay a flat monthly fee to the ISP (above the flat fee already paid to his LEC for **use of the local exchange network**). The ISP typically purchases business lines from a LEC, for which it pays a flat monthly fee that allows unlimited **incoming calls**." 206 F.3d at 4, citing FCC Ruling, 14 FCC Rcd at 3691 (p 4). (Emphasis added.)

²⁷ "Telecommunications" as defined in the Act as: "the transmission, between or among points specified by the user, of information of the user's choosing, **without change in the form or content** of the information as sent and received." 47 U.S.C. ' 153(43). (Emphasis added.)

²⁸ *Id.*

²⁹ "The term "local exchange carrier" means any person that is **engaged in the provision of telephone exchange service or exchange access**. Such term does not include a person insofar as such person is engaged in the provision of a commercial mobile service under section 332(c) of this title, except to the extent that the Commission finds that such service should be included in the definition of such term." 47 U.S.C. s 153(26): Definitions. (Emphasis added.)

"In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, 11 FCC Rcd 21905, 22023 (p 248) (1996), the Commission clearly stated that 'ISPs do not use exchange access.'" 206 F.3d at 8.

³⁰ The D.C. Court distinguished the instant matter from precedent involving "continuous" communications:

- ISPs as "information service providers"³² who "originate"³³ "calls" versus telecommunications "carriers" or "providers,"³⁴
- and finally, as "*an independent ground requiring remand*,"³⁵ the tautological reasoning or lack thereof on the parts of several (and opposing) parties that, if ISP or Internet traffic is not either "local" or "local exchange service", or "interstate" or "exchange access," within traditional meanings, it must be exclusively the 'other.'³⁶

As discussed below, we agree.

DISCUSSION

II. THE SCOPE OF RECIPROCAL COMPENSATION REQUIREMENT UNDER § 251(b)(5) OF THE ACT UNEQUIVACOBLY ENCOMPASSES THE TRANSPORT AND TERMINATION OF ISP-BOUND TRAFFIC

Determining the scope of the reciprocal compensation pursuant to § 251(b)(5) requires the following three tasks: an interpretive examination of the law, an examination of the analysis used by the Commission and an examination of the actual functionality of

"But the cases [the Commission] relied on for using this analysis are *not on point*. Both *involved a single continuous communication*, originated by an end-user, *switched by a long-distance communications carrier*, and eventually delivered to its destination." 206 F.3d at 6.

³¹ 47 U.S.C. ' 153(43).

³² "[I]nformation services,' defined in the Act as offering "a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications." 47 U.S.C. ' 153(20). Access Charge Reform, CC Docket No. 96-262, First Report and Order, 12 FCC Rcd 15982, 16131-32 n.498 (1997) (*Access Charge Reform Order*), *aff'd sub nom. Southwestern Bell Tel. Co. v. FCC*, 153 F.3d 523 (8th Cir. 1998). *See also* Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, at 11516 (1998) (*Universal Service Report to Congress*) (reiterating Commission's conclusion that the 1996 Act's definitions of telecommunications services and information services "essentially correspond to the pre-existing categories of basic and enhanced services")." *Ruling* at 2.

³³ 47 CFR s 51.701(b)(1).

³⁴ 47 U.S.C. s 153(26).

³⁵ 206 F.3d at 8. (Emphasis Added.)

³⁶ *Id.*

certain telecommunications, i.e., ISP-bound traffic. In turn, these three tasks fall within the major issues that the D.C. Court addressed in its March 24, 2000 decision.

A. Section 251(b)(5) Mandates, Based Upon The Relevant Terms, Reciprocal Compensation For ISP-Bound Traffic.

Section 251(b)(5) of the Act requires reciprocal compensation for ISP-bound traffic, mandating that all local exchange carriers “establish reciprocal compensation arrangements for the transport and termination of telecommunications.”³⁷ ISP-bound traffic is subject to reciprocal compensation because it involves the transport and termination of telecommunications in a local exchange area. The essence of Section 251(b)(5) is dependent upon core terms such as telecommunications, transport, termination and local calls, among several others, as enunciated by the DC Court, and elaborated upon below.

“Telecommunications” is defined in the Act as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”³⁸ More precisely, it is codified that ISP-bound traffic ceases to be telecommunications once delivered to the ISP customer’s facility.³⁹ ISP-bound traffic is “telecommunications” as codified because it is a transmission between points specified by the user without change in the form or content of the information as sent and received. In support of this, the D.C. Court found the Commission’s ruling has not “satisfactorily explained why an ISP is not, for the purposes

³⁷ 47 U.S.C. § 251(b)(5).

³⁸ 47 U.S.C. § 153(43).

³⁹ *Id.* at 6. However, ISP-bound traffic is to be distinguished with the ISP-*outbound* traffic in that the *outbound* portion constitutes a separate communication and different type of service (i.e., information service, with Internet Service Providers as the Information Service Providers) for the end user ISP, and whomever their customer may be.

of reciprocal compensation, ‘simply a communications-intensive business end user selling a product to other consumer and business end-users’”⁴⁰ as would be the case in a typical telecommunication in any business. Excluding, for the moment, “voice-over-IP,” the D.C. Court’s analysis was in line with industry understanding – the traffic terminates with the CLEC, and is passed on to the ISPs, who do many things with the communications they receive, and do not simply pass the transmission through, as a tandem or central office switch would for a typical voice call, as is elaborated on in more detail in Section V.

The D.C. Court held, based on the FCC’s definition, that the term “terminates” is defined as “the switching of traffic that is subject to section 251(b)(5) at the terminating carrier’s end office switch (or equivalent facility) and delivery of that traffic from that switch to the called party’s premises.”⁴¹ The D.C. Court went on to state that ISPs “appear to fit this definition: the traffic is switched by the LEC whose customer is the ISP and then delivered to the ISP, which is clearly the “called party.”⁴² It logically follows then that “when the traffic is switched by the LEC whose customer is the ISP and then delivered to the ISP,” as the D.C. Court explicitly stated, an “ISP is clearly the called party” -- the end user: the point of termination.⁴³ Nevertheless, the Commission ruled that the communication does not terminate at the ISP’s local server.⁴⁴ Perhaps, in a gesture to keep things as simple and consistent as possible, the Commission attempted to use the same simple end-to-end jurisdictional analysis for the application of Section 251 (b)(5), which unfortunately oversimplified the application to the point of inaccuracy and

⁴⁰ *Id.* at 7.

⁴¹ *Id.* at 6.

⁴² *Id.* at 6.

⁴³ *Id.* at 6.

some inconsistency among the states,⁴⁵ probably creating exactly the opposite result desired.

The D.C. Court has specifically directed the FCC to articulate some defensible method of analysis that demonstrates a plausible or convincing reason to override the widely accepted understanding that ISP-bound traffic terminates at the ISP facility and to adopt within its reasoning a thorough treatment of termination.⁴⁶ RNK Telecom shares the D.C. Court's perplexity with the Commission's express or implied exclusion of the "call termination" concept from its chosen method of analysis. The D.C. Court observed that, simply because the ISP facilitates ISP-*outbound* communications, "this does not imply that the original communication does not "terminate" at the ISP."⁴⁷ By excluding termination from its method of analysis, the Commission purposefully avoided the bald fact that ISP-bound traffic both terminates at the ISP facility and is by definition local traffic subject to reciprocal compensation.

Additionally, the FCC has held that for the purposes of reciprocal compensation, "arrangements for the transport and termination" of telecommunications applies only to local telecommunications traffic.⁴⁸ ISP-bound traffic is typically local telecommunication traffic because it is a transmission that originates and is transported and terminated in a local service area.⁴⁹ Whether reciprocal compensation applies to any given communications transmission begins with the transmission path of the call. When

⁴⁴ FCC Ruling, ¶ 11.

⁴⁵ Most notably, the public utility commissions in Massachusetts, Louisiana, West Virginia, and New Jersey, where the PUCs either reversed existing decisions, or used the FCC's order as the crux to institute policies denying compensation for ISP-bound traffic.

⁴⁶ *Bell Tel. Co.*, 206 F.3d at 6.

⁴⁷ *Bell Tel. Co.*, 206 F.3d at 7.

⁴⁸ See 47 C.F.R. § 51.701; *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order*, CC Docket Nos. 96-98, 95-185, 11 FCC Rcd 15499, 16013 (1996).

⁴⁹ *Bell Tel. Co.*, 206 F.3d at 6.

the transmission path originates and terminates between two “subscribers” in a local exchange area, that call is local traffic by law.⁵⁰

RNK Telecom asks the Commission to take notice of the Fifth Circuit Appeals Court⁵¹ and an example or two from the numerous State Commissions⁵² that concluded ISP bound calls are local traffic because such calls terminate at the ISP facility.⁵³ Because ISP-bound traffic terminates at the ISP facility, unlike traffic switched or exchanged between carriers (interexchange) which does not terminate at a/the “switch,” but rather at an end point, a proper application of the end-to-end analysis, if possible at all, would result in a finding that ISP-bound traffic from a user is local as it originates and terminates at the ISP facility (when both are undisputedly within a local calling area). Thus, traffic that is delivered to an ISP within a local exchange area is local traffic. Therefore, ISP-bound traffic should be subject to reciprocal compensation under § 251(b)(5) of the Act.

Reciprocal compensation is required by § 251 (b)(5) for the “transport and termination of telecommunication,”⁵⁴ where telecommunication “terminates for

⁵⁰ FCC Ruling, ¶ 7.

⁵¹ *Southwestern Bell Tel. Co. v. PUC Comm’ Texas*, 208 F.3d 475, 486 (5th Cir. 2000).

⁵² See e.g., “Arbitration Award,” *In the Matter of the Petition of Global NAPs South, Inc. for the Arbitration of Unresolved Issues from the Interconnection Negotiations With Bell Atlantic-Delaware, Inc.*, Delaware Public Service Commission Docket No. 98-540 (March 9, 1999); “Draft Arbitrator’s Report,” *In the Matter of the Petition of Pacific Bell (U1001 C) for arbitration of an Interconnection Agreement with Pac-West Telecomm, Inc (U5266 C) pursuant to Section 256(b) of the Telecommunications Act of 1996*, California Public Utilities Commission Application 98-11-024 (March 30, 1999); and “Order Adopting Revised Arbitration Decision” and “Revised Arbitration Decision,” *In re petition of Pac-west Telecomm Inc, for arbitration pursuant to Section 252 of the Telecommunications Act of 1996 to establish an Interconnection Agreement with Nevada Bell*, Nevada Public Utilities Commission Docket 98-10015 (April 12, 1999). Concluding the FCC has had a longstanding policy of treating ISP-bound traffic as local and parties are bound by existing interconnection agreements treating ISP-bound traffic as local for purposes of reciprocal compensation.

⁵³ *Southwestern Bell v. FCC*, 153 F.3d 523 (8th Cir. 1998).

⁵⁴ 47 U.S.C. § 251(b)(5).

reciprocal compensation purposes when it ceases to be “telecommunications.”⁵⁵ Clearly, ISP-bound traffic falls squarely under each element pursuant to § 251(b)(5) of the Act and should be subject to reciprocal compensation.

B. The Commission’s Chosen Method Of Analysis Was Fatally Flawed As Unreasonably Extended Beyond The Analysis’ Traditional Scope, Not Relevant In The Context Applied, And Contradicts The Technical Truths Of ISP-Bound Traffic

Granted that an end-to-end analysis is proper to determine the FCC’s jurisdictional authority, the extension of the analysis to the instant query to determine whether ISP-bound calls are local or long distance traffic, was unexplained and, likely, erroneous. In vacating and remanding the Commission’s ruling, the D.C. Court stated, “[t]he end-to-end analysis applied by the Commission here is one that it has traditionally used to determine whether a call is within its interstate jurisdiction. Here it used the analysis for quite a different purpose, without explaining why such an extension made sense in terms of the statute or the Commission’s own regulations.” Ultimately, the Commission used the end-to-end analysis for the purposes of determining reciprocal compensation issues under § 251 of the Act “without explaining why such an extension [of the end-to-end analysis] made sense in terms of the statute or the Commission’s own regulations.”⁵⁶

The D.C. Court stated that “[c]alls to ISPs appear to fit [the] definition”⁵⁷ of telecommunications subject to reciprocal compensation under § 251(b)(5) to the extent that the Commission’s “arguments supporting use of the end-to-end analysis in the

⁵⁵ FCC Ruling, ¶ 8 *citing e.g.*, RCN Telecom Services (RCN) Comments at 6; Teleport Communications Group Inc. (TCG) Comments at 4-5; Worldcom, Inc. Comments at 8-9.

⁵⁶ *Bell Tel. Co.*, 206 F.3d at 3.

⁵⁷ *Bell Tel. Co.*, 206 F.3d at 6.

jurisdictional analysis are not obviously transferable to this context.”⁵⁸ This quasi-relevance is especially suspect as a number of courts and state agencies that have ruled on this issue have reached the opposite conclusion, which is that an ISP-bound call terminates at the ISP facility.⁵⁹

In addition, the end-to-end analysis did not successfully discern whether ISP-bound traffic necessarily falls under either the local or the long distance traffic model. Another source of confusion that the FCC’s ruling has created regarding termination of ISP-bound traffic is the Commission’s trepid treatment of ISP-bound traffic in terms of how it fits within either the local or long distance traffic models. The D.C. Court was not convinced by what it saw as tautological treatment of these models.⁶⁰ The Commission has concluded that ISP-bound traffic is continuous and therefore is non-local within the definition of the Act.⁶¹ Yet, the Commission has also concluded that ISP-bound traffic is not long distance or “interexchange,” insofar as ISPs do not use exchange access, within the Act for the purposes of access charges – interexchange being, by virtue of the instant FCC tautology, the only other option possible.⁶² The FCC disparate treatment of ISP-

⁵⁸ *Bell Tel. Co.*, 206 F.3d at 6.

⁵⁹ See “Arbitration Award,” *In the Matter of the Petition of Global NAPs South, Inc. for the Arbitration of Unresolved Issues from the Interconnection Negotiations With Bell Atlantic-Delaware, Inc.*, Delaware Public Service Commission Docket No. 98-540 (March 9, 1999); “Draft Arbitrator’s Report,” *In the Matter of the Petition of Pacific Bell (U1001 C) for arbitration of an Interconnection Agreement with Pac-West Telecomm, Inc (U5266 C) pursuant to Section 256(b) of the Telecommunications Act of 1996*, California Public Utilities Commission Application 98-11-024 (March 30, 1999); and “Order Adopting Revised Arbitration Decision” and “Revised Arbitration Decision,” *In re petition of Pac-west Telecomm Inc, for arbitration pursuant to Section 252 of the Telecommunications Act of 1996 to establish an Interconnection Agreement with Nevada Bell*, Nevada Public Utilities Commission Docket 98-10015 (April 12, 1999). Concluding the FCC has had a longstanding policy of treating ISP-bound traffic as local and parties are bound by existing interconnection agreements treating ISP-bound traffic as local for purposes of reciprocal compensation..

⁶⁰ tautology as defined by *The American Heritage® Dictionary of the English Language, Third Edition* Copyright © 1992, 1996 by Houghton Mifflin Company.

⁶¹ FCC Ruling ¶ 10.

⁶² *Bell Tel. Co.*, 206 F.3d at 8. “ISPs do not use exchange access.”

bound traffic demonstrates that the Commission has itself recognized that ISP traffic is unlike conventional “circuit switched network” communications.

Thus far, the Commission has not used its existing definitions and has not relied on a method of analysis that is consistent with the meaning of key terminology and the common understanding of concepts crucial to making a proper determination of the application ISP-bound traffic for the purposes of reciprocal compensation.⁶³ It is apparent that the D.C. Court believes, based on the totality of all relevant factors that, had the Commission conducted an analysis that incorporated the Commission’s definition of “termination” and used an analysis relevant to examining “whether a call to an ISP should fit within the local call model of two collaborating LECs or the long-distance model of a long-distance carrier collaborating with two LECs,” the Commission would have likely ruled that ISP-bound traffic is subject to reciprocal compensation.

Instead, the Commission “avoided this result [concluding that ISP-bound traffic is subject to reciprocal compensation] by analyzing the communication on an end-to-end basis.”⁶⁴ In addition, the Commission “avoided” this result by also “fail[ing] to apply, or even mention, its definition of “termination,” namely ‘the switching of traffic that is subject to section 251(b)(5) at the terminating carrier’s end office switch (or equivalent facility) and delivery of that traffic from that switch to the called party’s premises.’”⁶⁵

Further, the use of an end-to-end analysis and the Commission’s refusal to “divide communications” overlooks the fact that ISPs are “end users,” resulting in an inaccurate finding that “ISP-bound” or “Internet” traffic, erroneously used interchangeably, is

⁶³ *Bell Tel. Co.*, 206 F.3d at 3. (holding that the D.C. Circuit Court vacated and remanded the Commission’s analysis requires further explanation due to its inexplicable extension to the current application).

⁶⁴ *Id.* at 3.

continuous or a “one call” process. The Commission’s refusal to recognize the “multiple components” of the Internet traffic oversimplifies the issue.

That the Commission has acknowledged this distinction in the past is significant because it provides regulatory credibility to the already commonplace acceptance of the true characteristics and multiple components of ISP-bound traffic.⁶⁶ These issues are fundamentally and factually relevant, and furthermore are inextricable from the Commission’s future method of analysis to classify ISP-bound traffic. As arguably the most important and influential neutral decision maker, responsible for enforcing pro-competitive practices and open markets and creating stability in the infant local markets, the Commission simply cannot brush these issues aside.

The D.C. Court repeatedly expressed uncertainty towards the method of analysis used by the Commission upon which the Commission concluded that ISP-bound traffic is not subject to reciprocal compensation under § 251(b)(5) by stating that “the extension of ‘end-to-end’ analysis from jurisdictional purposes to the present context [discerning subjectivity of ISP-bound traffic to §251] yields intuitively backwards results.”⁶⁷ Nevertheless, should the Commission reconsider the matter by use of an analysis that does incorporate the term “termination” as currently understood and also derives reference from other relevant factors, as discussed immediately above, the result will undoubtedly favor subjecting ISP-bound traffic to reciprocal compensation.

⁶⁵ *Id.* at 6.

⁶⁶ *Report and Order on Universal Service*, CC Docket No. 96-45, FCC 97-157 at P 83 (1997).

⁶⁷ *Id.* at 6.

C. A More Accurate Rendition Of ISP-Bound Traffic Includes The Factual And Technical Evidence That It Is Comprised Of “Multiple Components”

At the behest of the D.C. Court’s request for further explanation,⁶⁸ the Commission must consider on remand the Court’s impression that the real technical differences between conventional and Internet-related technologies, and within Internet traffic technology, will be best suited to accurately examine the precise nature of ISP-bound calls. This technology is not beyond the Commission or the industry. The technical differences between ISP-bound/ISP-*outbound* communications (collectively “Internet traffic”) and conventional “circuit switched” communications are material and potentially dispositive⁶⁹ to considering whether ISP-bound traffic is subject to reciprocal compensation.⁷⁰

The D.C. Court is concerned that the Commission’s conclusion that ISP-bound traffic is “continuous” is inaccurate because, as the Court sees it, the selection of this analysis was based on both “the end points of the communications” and on the Commission’s reliance upon a traditional refusal to “divide [conventional] communications at any intermediate points of switching or exchanges between carriers.”⁷¹ The D.C. Court saw no justification for extending the end-to-end analysis, not only beyond its traditional usefulness, but also one further step removed, i.e., ISP-bound traffic, pointing out that “packet-switched” network communications are, at a

⁶⁸ *Id.* at 3.

⁶⁹ Should those differences impact the definitions and applications of relevant concepts, their application to the instant distinctions would be unequivocally resolved. See *infra*, Section V.

⁷⁰ A comprehensive, detailed explanation of the technical construction of the components of Internet traffic is provided below. See *infra*, Section.

⁷¹ *Id.* at 4. The D.C. Court observed that the FCC “has focused on ‘the end points of the communication and consistently has rejected attempts to divide communications at any intermediate points *of switching or exchange between carriers.*’ ” *citing* FCC Ruling, 14 FCC Rcd. At 3695 (p. 10) (Emph. Added.) Later, we

technical level, very different from conventional “circuit switched” network communication.⁷²

ISP-bound traffic is a separate and distinct transmission from the ISP-*outbound* traffic and therefore “Internet-bound” traffic from the originating end user is in reality and effect a “two-call” process. The D.C. Court also point to this same conclusion subsequently made by the 5th Circuit Appeals Court in March of this year.⁷³ Nevertheless, the Commission has eschewed adopting within its method of analysis the technical construction of Internet traffic. The Commission’s decision to reject the reality that “multiple components” exist within Internet traffic, further, belies its own treatment of ISPs as “end users” of the telephone system, or the “called party.”⁷⁴ The FCC’s treatment of ISPs as “end users” for pricing purposes is juxtaposed with its instant contention that ISP-bound traffic is nonetheless continuous, occasionally interstate, and therefore in their minds not subject to reciprocal compensation.⁷⁵

The FCC’s difficulty classifying ISP-bound traffic appears to stem, as the D.C. Court has superbly articulated, from it not fitting either squarely or well within either the traditional local or long distance models.⁷⁶ The reason that ISP traffic does not fit within these models is because of the technical advances characteristic of the communications

will mention the important undisputed facts that an ISP neither operates telephonic switches, nor is a “carrier” under the Act or any FCC ruling or order.

⁷² *Id.* at 4.

⁷³ *Southwestern Bell Tel. Co. v. PUC Comm’ Texas*, 208 F.3d 475, 486 (5th Cir. 2000).

⁷⁴ *Bell Tel. Co.*, 206 F.3d at 6; *Southwestern Bell Tel. Co. v. PUC Comm’ Texas*, 208 F.3d 475, 486 (5th Cir. 2000).

⁷⁵ *Southwestern Bell Tel. Co.*, at 486. The Fifth Circuit Court arguing in favor of the Texas District Court and Texas PUC treatment that ISP-bound calls are local because the FCC allows ISPs to purchase telephone services at local business rates rather than interstate access tariffs. It should also be further noted that the FCC has not adopted that the ISP-*outbound* portion of the communication as an interexchange communication.

⁷⁶ *Bell Tel. Co.*, 206 F.3d at 5. “Calls to ISPs are not quite local, because there is some communication taking place between the ISP and the out-of-state websites. But they are not quite long-distance, because

themselves. In other words, advanced communications have multiple components and does not readily lend itself to either of the two old models, whether taken as single or multiple units of telecommunication for jurisdictional purposes.

Dividing Internet communication into multiple components (e.g., telecommunication service, ISP-bound, information service, ISP-outbound, and Internet, in-state and foreign) is more accurate than the Commission's "continuous" concept or terminology. The Commission's conclusion that ISP or Internet traffic is continuous still does not necessarily require that this equivocation on "continuity" be synonymous with: (a) non-terminating, (b) non-local, or (c) interstate. Furthermore, the Commission has identified ISP-bound calls as "jurisdictionally mixed" but follows with the unsubstantiated claim that such calls are "substantially interstate."⁷⁷

ISP-bound traffic, a subclass of enhanced service providers ("ESPs"), is a hybrid communication and certainly does not squarely fit within either field. ISP-bound traffic is a hybrid communication for one simple reason: it involves not only multiple distinguishing and distinguishable components that can be classified as either local and/or long distance traffic, unlike conventional communications, but also involves two different types of services. In addition to the fact that ISP traffic is technically comprised of multiple components, ISP traffic is also a combination of telecommunications service (the ISP-bound traffic) and information (or information-like) service (the ISP-outbound

the subsequent communication is not really a continuation, in the conventional sense, of the initial call to the ISP."

⁷⁷ FCC Ruling ¶ 18-19.

or Internet bound traffic).⁷⁸ The FCC cannot escape the factual characteristics that constitute ISP-bound traffic.

In fact, the FCC has impliedly recognized the merit of this technically/factually based analysis as discussed above, or otherwise, ESPs would never have been exempted from the access charge system starting in the early 1980's. The Commission should reconsider its Reciprocal Compensation Ruling⁷⁹ on ISP-bound traffic. On remand, the Commission should not employ the end-to-end analysis and instead should adopt the more accurate technically/factually based analysis.

Should the Commission continue to adopt the position that ISP or Internet traffic is in theory a "continuous" transmissions, the technical fact remains that an a majority of the actual transmissions very simply do terminate at the ISP facility and is only an ordinary local call. In support of this assertions and our certainty that quantification can be achieved, RNK Telecom tracks information that by extension could ultimately resolve ISP-bound traffic and reciprocal compensation issues underlying the instant dispute. This method is demonstrated below in Section V.

⁷⁸ The D.C. Appeals Court reasoned that ISP traffic should be separated into two separate communications traffic: (a) ISP-bound traffic is a telecommunications service portion of the communications traffic and (b) ISP-outbound traffic is information portion of the communications traffic. Separation of the communications traffic is proper and accurately denotes the true manner in which ISP-bound calls are local traffic. By using the end-to-end analysis and refusing to appropriately dissect ISP-bound traffic into the separate identifiable components.

V. THE FCC SHOULD ANALYZE AND REVIEW NEW OR INNOVATIVE INTER-CARRIER COMPENSATION ARRANGEMENTS FOR ISP-BOUND TRAFFIC ONLY IN LIGHT OF THEIR FACTUAL RELEVANCE TO THE RELATIONSHIPS BETWEEN THE PARTIES

Many CLECs are finding it difficult, inefficient, and energy-consuming to litigate and settle negotiations with ILECs regarding reciprocal compensation. In order to sustain the operations of their companies, they have had no choice but to create alternative arrangements. An example of some of the arrangements that telecommunications companies are using or may plan to use follow below, and an further look at a theory of compensation the Commission should consider if it somehow affirms its former conclusion that ISP-bound traffic is interstate, and also largely interstate.

A. Current Amendments to Interconnection Agreements Regarding Reciprocal Compensation Reflect Unequal Bargaining Power of the Parties, and/or Parties That Do Not Contemplate Exchanging Relevant Traffic

It has come to RNK's attention that a few telecommunications companies have compromised or are willing to compromise their rates for inter-carrier compensation with Bell Atlantic, for example, by amending their interconnection agreements. Some state commissions have suggested or inferred that these amendments should serve as models to other CLECs in regards to settling the debates over inter-carrier compensation for Internet and other traffic.⁸⁰ RNK believes generally, that the agreements alluded to here should not be made a default standard, because, while possibly good for the individual companies, are not exemplary of relevant negotiation or settlement that should be made

⁸⁰See e.g., *Order Denying Reconsideration for MCI Worldcom, and Dismissing Global NAPs Complaint*, Massachusetts DTE 97-116-D/99-39 at 18 n. 13 (2000); *Local Calling Areas, Request for Comments*(withdrawn) NH PUC, DT – 054, Phase II (2000) (requesting preliminary position papers regarding the Bell Atlantic-NH/Level 3, and PaeTec Interconnection Agreement amendments addressing reciprocal compensation.

between ILECs and other CLECs. Two examples of these companies are Level 3 Communications, LLC (“Level 3”) and PaeTec, Inc. (“PaeTec”).

RNK believes that the agreements that Level 3 and PaeTec have made with Bell Atlantic are, in fact, relevant only to those specific companies and should have no bearing on any future or past negotiations that other CLECs may have with ILECs. Level 3 and PaeTec willingly compromised their reciprocal compensation rates well below the basic regional standard TELRIC rates. RNK believes that Level 3 and PaeTec were both in positions to amend their respective interconnection agreements by compromising what was for them a likely non-issue in reciprocal compensation in favor of other issues more beneficial to them and their particular business plans.

Level 3, for example, is not even a registered CLEC in many of the states in which the amendments to their interconnection agreements occurred. This is because Level 3 is a broadband infrastructure company that provides wholesale Internet communications services: a “carrier’s carrier.” In fact, as it has stated openly, it sells capacity on its network to ISPs (approximately 85% of its clientele) and to CLECs (approximately 15% of its clientele) and does not have an interest in serving end users as a CLEC. In fact Level 3 (through XCom, which it purchased), returned 167 NXX codes in Massachusetts in 1999 for arguably the same reason, it is a “carrier’s carrier,” and that is its primary business. “Carrier’s carriers” are productive lucrative companies. RNK uses several of them, such as Northeast Optical Network, to expand RNK’s network, but these carriers should not be generally confused with CLECs, even though many CLECs also serve other carriers with additional capacity as well. XCom, which was a CLEC with end user customers, likely had quite a bit of reciprocal compensation that was

unpaid, which was owed to Level 3, which also received provisioning and other perks in its Interconnection amendment, adding further reason for Level 3 to make the its deal with Bell Atlantic. Therefore, it is of little or no consequence to Level 3 to agree to a gradual decrease in reciprocal compensation rates well below standard TELRIC rates.

PaeTec, on the other hand, is a registered and functions as a CLEC, but, like Level 3, surely had its own unique reasons for making a “deal” on reciprocal compensation. Like most CLECs attempting to offer service in this pre-competitive market, PaeTec has a significant fiscal deficit, shown publicly in its annual public filings. PaeTec may have decided to settle the issue of reciprocal compensation by accepting an abnormally low rate rather than receive nothing at all, and spending its money in litigation, to use the revenue to invest in and sustain its operations. There are probably many other reasons PaeTec made a decision to amend its agreement with Bell Atlantic, but, unless those reasons are made public, no federal or state agency should use company-unique agreements as a default for other companies, unless those other companies have, for instance, the same business plan, corporate and fiscal structure, among numerous other similarities. Even then, agencies would need evidence.

It is not coincidence that two of the hundreds of CLECs in Bell Atlantic’s territory have not similarly amended their Interconnection agreements. Thus, RNK would balk should the Commission institute the amendments that these or similar companies negotiated as a universal or exemplary policy for other CLECs. In addition, if, via state or federal action, CLECs are forced into niche deals, it would undercut the premise of negotiated Interconnection Agreements, and block the intent of the Act to create a competitive market.

B. Monitoring and Tracking of ISP-Bound and ISP-Outbound Traffic to Determine Actual Traffic-Line Minutes Used Is Relatively Simple and Shows That ISP-Bound Traffic is Local

Contrary to the Commission's assertion that ISP-bound traffic is largely interstate and may be "too difficult" to monitor, RNK theorizes the contrary. RNK, like other CLECs in those states where RNK operates facilities, due to state agency decisions, has not received any compensation for Internet traffic of any type since February 1999. RNK has, however, studied and evaluated the issue of compensation for ISP-bound and other Internet traffic, and made informal recommendations to Bell Atlantic how a large portion of the now uncompensated traffic should be compensated, even under current Commission and state rulings that used to withhold compensation. RNK proposes a formula that will allow local telephone companies serving ISPs to compare actual minutes of ISP-bound minutes to ISP-outbound minutes, and has found that a recent comparison of one of its own ISP customer's in-/out-bound traffic shows that the total minutes used are substantially intraLATA. Should the Commission reaffirm its assertion that all ISP traffic (ISP-bound and ISP-outbound) is continuous, which as discussed above is inaccurate and unaligned with D.C., Court's remand decision, RNK challenges this statement by showing that a significant percentage of the traffic-minutes used is intraLATA. Furthermore, monitoring and calculating the ISP-bound to ISP-outbound ratio is relatively simple and can be performed by any LEC.

To demonstrate the methodology RNK proposes, it is necessary to review the basic concepts of how a transmission arrives at the Internet or a local server or platform.⁸¹ First, a local telephone customer (here presumed to be an ILEC customer, as ILECs

control approximately 95 percent of the local market) dials a local number. Second the call travels from the customer's modem on an analog line to the ILEC's switch facility.⁸² The call is then transmitted to the ISP's telephone company's (here presumed to be a CLEC) switch, where it is transmitted through the CLEC's multiplexer⁸³ and along a T1⁸⁴ or DS3⁸⁵ (or greater) capacity line. From the CLEC's multiplexer, which aggregates transmissions without changing their form, the transmission travels to the ISP, usually within the same LATA ("local call"). This portion of the call (to the ISP) is an open and continuous switch circuit transmission. If the transmission then flows only as far as a local server or platform,⁸⁶ and the ISP's facility is located within the same LATA as the CLEC's switch then, under the Commission's former end-to-end analysis, the call should be treated as local.

In any case, at this point, the transmitted data's form and content is converted at the ISP. Once the transmission is processed by the ISP, the mode of transmission changes from a continuous switch circuit to what has been referenced as a "packet-

⁸¹ The process explained is typical of an ILEC's customer dialing into an ISP facility via a CLEC switch. Although this is a simplification of the entire process, only pertinent and necessary concepts are described, as are applicable to RNK's methodology.

⁸² An analog line contains twenty-four (24) single-lane "pathways" upon which only twenty-four (24) packets/bytes can travel at any given second. Each "pathway" can only have one packet traveling upon it at any given moment. The ILEC customer is charged, by the ILEC, for the time that is spent on this line that and is not considered to be as cost effective as compared to the amount of information and the time it takes for the call to travel on the analog line.

⁸³ A multiplexer is a mechanism that compresses information and transforms a small number of T1s into DS3 lines. DS lines and T lines are equivalent.

⁸⁴ A T1 line is defined as being a line with twenty-four single-lane channels.

⁸⁵ A DS3 line consists of 28 T1 lines, therefore having 672 (28 x 24) channels on which bytes may be able to travel. It is noted, however, that the DS3 line may only have 644 (28 x 23) channels, as the twenty-fourth channel of every T1 line is used for purposes other than customer-to-ISP communication. If visualized, a DS3 line can be characterized as a superhighway with over six hundred lanes upon which hundreds of bytes can travel on each lane or channel. Due to this fact, a DS3 line can send more information at a quicker speed.

⁸⁶ A customer usually transmits a call to a local server or platform in order to access services such as electronic mail and news groups.

switched” process.⁸⁷ The port master⁸⁸ at the ISP transmits packets to the ISP’s router,⁸⁹ which translates the incoming packets based upon source and destination addresses. If the transmission actually travels to the Internet, under the Commission’s end-to-end analysis, then it may be considered an interLATA call.⁹⁰ RNK makes the distinction that not all calls that leave the ISP facility are necessarily interLATA. Since RNK is currently unaware of a technology that would allow transmissions leaving an ISP’s facility to be separated into interLATA and intraLATA, RNK is willing to consider ISP-outbound transmissions interLATA *arguendo*.

RNK sets forth a proposal to use a program that should enable CLECs to calculate the number of byte-minutes of ISP’s outbound traffic that may leave the LATA on a DS3 or equivalent line (“X”).⁹¹ This can be achieved by converting the number of digitized bytes into minutes. The equation is:

$$X = \frac{E \times D}{F}$$

“E” represents the 24-hour average bytes per second, ISP-outbound. Because each byte travels at the same speed, the number of seconds that these bytes spend on the outbound line can be calculated by counting the number of bytes that pass through the router.⁹² Due to the fact that every byte, by definition the same size, travels at the same

⁸⁷ A packet-switched process is a process where every packet is forwarded as received on a non-continuous circuit.

⁸⁸ The port master is a series of modems that recognize the modem of the ILEC’s customer. Upon recognition, the port master then forwards the call to the router.

⁸⁹ The ISP’s router transmits the call along the most efficient and cost-effective path, according to the “return address” and the “destination address” of the byte.

⁹⁰ However, RNK contends that a call transmitted onward from the ISP facility should depend on where it “ends” under the FCC’s end-to-end analysis, to determine whether a call is inter or intrastate.

⁹¹ RNK sets forth this technique as a suggestion only and is willing to accept comments regarding its feasibility. RNK currently does not use this method implement this method in the process of collecting for reciprocal compensation payments for Internet traffic.

⁹² This number can be calculated for every 24-hour period with the MRTG software program that is readily available through the Free Software Foundation.

speed, each byte uses a specific “slice” of time. By cumulating each slice of time, a CLEC is able to quantify the time that was used for the byte to travel along the line, thereby determining the amount of time that was spent on the DS3 line from the ISP-outbound transmission.

The denominator, “F,” is a constant figure which represents the maximum speed of a DS3 line working at 100% capacity.⁹³

“D” is a constant number that represents the total traffic possible on a DS3 line.⁹⁴ Because “F” and “D” are constants and “E” can be determined by using MRTG software, “X” is calculable. Using this methodology, any CLEC is able to determine the number of outgoing minutes used on any ISP line. Only a small portion of the minutes used on the ISP-bound user line are actually translated and sent outbound to either local servers or the Internet.

This method can determine the minutes usage for calls that originate with an originating user to the end user-ISP and thus, typically if not exclusively, travel within the LATA, as compared to those bytes outbound that may, or may not, travel out of the LATA. The use of a program that can reveal this type of information promises to decrease future disputes regarding ISP-outbound traffic.⁹⁵

⁹³ This number is always 5,630,625 bytes per second.

⁹⁴ This variable equals 967,680 (28 T1 lines each having 24 channels multiplied by 1440, the total number of minutes in a day).

⁹⁵ RNK believes that, when using this methodology, the burden of proof should lie on the CLEC. Accordingly, any methods used should be codified as a standard rather than as a negotiable item in interconnection agreements.

CONCLUSION

For the aforementioned reasons, RNK urges the Commission to consider RNK's comments and methodology when revising its Order under the DC Court's vacatur and remand decision. RNK hopes that careful review of the Court's decision, and RNK's comments will result in a Commission order that is equitable, and promotes growth and market stability in the local telecommunications market.

Respectfully submitted

RNK TELECOM,

By its attorneys,

By: _____
Douglas S. Denny-Brown
General Counsel

By: _____
Yvette Bigelow
Counsel

By: _____
Sarah Ahmad
Law Clerk

By: _____
Loik Henderson
Law Clerk

Date: July 21, 2000